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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,047	03/01/2002	Bozidar Ferek-Petric	P-8158.03 DIV2	1360
27581	7590 06/16/2005		EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MS-LC340			OROPEZA, FRANCES P	
			ART UNIT	PAPER NUMBER
MINNEAPO	DLIS, MN 55432-5604		3762	
			DATE MAILED: 06/16/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.



		Application No.	Applicant(s)			
Office Action Summary		10/085,047	FEREK-PETRIC, BOZIDAR			
		Examiner	Art Unit			
		Frances P. Oropeza	3762			
Period fo	The MAILING DATE of this communication a r Reply	ppears on the cover sheet wi	th the correspondence address			
THE I - Exter after - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION is ions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by state aply received by the Office later than three months after the main digent term adjustment. See 37 CFR 1.704(b).	1.  1.136(a). In no event, however, may a reply within the statutory minimum of thirt will apply and will expire SIX (6) MON ute, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).			
Status						
1)🖂	Responsive to communication(s) filed on 23	May 2005.				
2a)⊠	This action is FINAL. 2b) This action is non-final.					
3)	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice unde	r <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.			
Dispositi	on of Claims					
4) 🖾	○ Claim(s) <u>40-42</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
· —	5) Claim(s) is/are allowed.					
•	Claim(s) <u>40-42</u> is/are rejected.					
•	Claim(s) is/are objected to.	llas alastias vascisas vasat				
8)	Claim(s) are subject to restriction and	/or election requirement.				
Applicati	on Papers		·			
9) 🗌 .	The specification is objected to by the Exami	ner.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the	• , ,	• •			
	Replacement drawing sheet(s) including the corre The oath or declaration is objected to by the	•	• • • • • • • • • • • • • • • • • • • •			
Priority u	nder 35 U.S.C. § 119					
a)[	Acknowledgment is made of a claim for foreignal All b) Some * c) None of:  1. Certified copies of the priority docume  2. Certified copies of the priority docume  3. Copies of the certified copies of the priority docume  application from the International Buresee the attached detailed Office action for a li	nts have been received. nts have been received in A iority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage			
Attachment	(s)					
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 · No(s)/Mail Date	Paper No(s	ummary (PTO-413) )/Mail Date Iformal Patent Application (PTO-152) 			

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### **DETAILED ACTION**

#### Response

1. The Applicant correctly noted claim 40 was not addressed in the rejection mailed 2/22/05. This omission resulted from a typographical error; the claim noted in paragraph 4 should have been 40 instead of 41. The rejection of record is being withdrawn and a new rejection established to address this error.

#### Declaration

2. The declararation filed on 5/23/05 under 37 CFR 1.131 is insufficient to overcome the rejection of claims 40-42 based upon the Soykan et al. (US 6206914) reference. The declaration is not signed and therefore has not been considered.

# Claim Rejections - 35 USC § 112

2. Claim 41 stands rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Examiner is unable to find in the specification the limitations in parenthesis:
... "mathematical" integral of "at least one of the blood flow signal and the sensed electrical signal". The specification does not define a "mathematical" integral nor how it is determined. In addition, specification page 16, line 24, indicates only the integral of the blood flow rate signal is

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calculated. New matter may not be added at this point in the prosecution. Appropriate correction is required.

The Applicant's arguments filed 5/23/05 have been fully considered but they are not convincing. The Applicant asserts the phrase "mathematical integral" is more precise than "integral", the specification reflects the phrase "mathematical integral", and the specification notes the "microcomputer calculates and integral", hence the term "mathematical integral" is supported by the disclosure. The Examiner disagrees. While the quote from the specification is correct and the phrase "mathematical integral" may be more precise than the phrase "integral", the phrase "mathematical integral" is not found in the specification and the method to determine the "mathematical integral" is not clearly defined, hence the rejection of record stands.

# Claim Rejections - 35 USC § 103

3. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soykan et al. (US 6206914) in view of Nappholz et al. (US 5113869).

Soykan et al. teach an implantable system that monitors ECG signals and coronary sinus blood flow signals to detect ischemia and provide treatment. The treatment can be patient initiated (abstract; col. 2 @ 30-40; col. 3 @ 23-63; col. 5 @ 21-36; col. 13 @ 46-64; col. 16 @ 23-46). As discussed, Soykan et al. disclose the claimed invention except for an alarm circuit.

Nappholz et al. teach patient self-treatment using an alarm for the purpose of making the patient aware when a condition exists that needs to be treated by medication. It would have been

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obvious to one having ordinary skill in the art at the time of the invention to have used an alarm in the Soykan et al. system in order to confirm the patient's self-diagnosis of angina and ensure the patient is not giving himself medication when it is not needed (col. 1 @ 5-10 and 44-54; col. 4 @ 18-21; col. 7 @ 12-25; col. 20 @ 18-38).

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soykan et al. (US 6206914) in view of Nappholz et al. (US 5113869) and further in view of Guracar et al. (US 6086539). As discussed in paragraph 3 of this action, modified Soykan et al. disclose the claimed invention except for the signal being an integral.

Guracar et al. teach flow signal analysis using an integral for the purpose of showing change in the cardiac signal over time. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used the intergral of the flow signal in the modified Soyken et al. system in order to accurately depict changes the cardiac cycle (col. 24 @ 7-12).

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soykan et al. (US 6206914) in view of Nappholz et al. (US 5113869) and further in view of Guracar et al. (US 6086539) and further in view of Ferek-Petric et al. (US 5316001). As discussed in paragraphs 3 and 4 of this action, modified Soykan et al. disclose the claimed invention except for outputting a pacing stimuli.

Ferek-Petric et al. teach cardiac electrotherapy using pacing stimuli based on blood flow and electrical activity signals for the purpose of more accurately monitoring the cardiac activity. It would have been obvious to one having ordinary skill in the art at the time of the invention to

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have used pacing stimuli based on blood flow and electrical activity signals in the modified Soykan et al. system in order to achieve correspondingly improved pacing results (abstract; col. 9 @ 14-53).

## Specification

6. The specification stands objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The Examiner is unable to find in the specification the limitations in parenthesis: ... "mathematical" integral of "at least one of the blood flow signal and the sensed electrical signal". New matter may not be added at this point in the prosecution. Appropriate correction is required.

### Statutory Basis

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frances P. Oropeza whose telephone number is (571) 272-4953. The examiner can normally be reached Monday through Friday from 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes, can be reached on (571) 272-4955. The telephone number for facsimiles for regular communication and After Final communications is (703) 872-9306.

Frances P. Oropeza Patent Examiner

Art Unit 3762

ANGELA D. SYKES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

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